

**ABSTRACT**

The invention relates to the use of IL-15 or active variants thereof and/or IL-15 activity enhancing compounds for the manufacture of a pharmaceutical composition for manipulating memory cells of the immune system, such as manipulating viability ad/or responsiveness of said memory cells. The IL-15 activity enhancing compound is for example lipopolysaccharide (LPS). The invention further relates to the use of IL-15 inhibiting or eliminating compounds for the manufacture of a pharmaceutical composition for manipulating memory cells of the immune system. Such inhibiting or eliminating compounds are for example anti-IL-15 antibodies, anti-IL-15R $\alpha$  antibodies, fragments of these antibodies, e.g. the Fab or F(ab')<sub>2</sub> fragment, soluble IL-15R $\alpha$ , fusion proteins consisting of soluble IL-15R $\alpha$ , and Fc fragment, compounds, e.g. peptides, binding and/or inhibiting functional IL-15 receptor, IL-15 antisense oligonucleotides.